The COMET-VR Carbon Sequestration Tool (http://www.cometvr.colostate.edu/)

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An online management tool called COMET-VR provides a simple and reliable method for estimating soil carbon sequestration. Storing, or "sequestering," carbon in soil as organic matter and in trees helps reduce the amount of carbon dioxide in the atmosphere. The concept of carbon sinks is based on the natural ability of trees, other plants and the soil to remove carbon dioxide from the atmosphere and store the carbon in wood, roots, leaves and the soil. This tool can aid a producer in making their management decisions. Producers insert their historic, current, and alternative farming and grazing practices into COMET-VR, which then estimates changes in fuel use, fertilizer and carbon storage for each alternative.

COMET-VR utilizes the CENTURY soil carbon model to provide estimated soil carbon changes resulting from changes to land management. Century is a generalized biogeochemical ecosystem model which simulates carbon (i.e., biomass), nitrogen and other nutrient dynamics. The model simulates cropland, grassland, forest and savanna ecosystems and land use changes between these different systems. CENTURY was developed by Colorado State University (CSU) and USDA Agriculture Research Service (ARS). Participants in the CSP program can earn $500 running COMET-VR to aid their management decisions.